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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/934,415	08/21/2001	Brendan J. Kitts	VIGN1160-1	8220

25094 7590 04/20/2004

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EXAMINER

ZHOU, TING

ART UNIT	PAPER NUMBER
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2173

DATE MAILED: 04/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/934,415

Applicant(s)

KITTS, BRENDAN J.

Examiner

Ting Zhou

Art Unit

2173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.5.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. Applicant's claim for domestic priority to provisional application number 60/226,798, filed on August 21, 2000 has been acknowledged.

Drawings

2. The drawings are objected to because Figure 1 should be labeled as "Prior Art" since it is disclosed as conventional in the Specification.
3. Applicant is required to submit a proposed drawing correction of the above noted deficiencies in reply to this Office action. However, formal correction of the noted defect may be deferred until after the examiner has considered the proposed drawing correction. Failure to timely submit the proposed drawing correction will result in the abandonment of the application.

Specification

4. The disclosure is objected to because of the following informalities:
 - a. Figure 1 should be described as prior art under the *Brief Description of the Drawings* section.
 - b. The use of "Fig. 3 depicts and exemplary" on line 1 of paragraph 0031 on page 7 of the Specification is grammatically incorrect. It is advised that the phrase be changed to -- Fig. 3 depicts an exemplary --.Appropriate correction is required.

Claim Objections

2. Applicant is advised that should claim 10 be found allowable, claim 11 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-5 and 10-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Chi et al. U.S. Patent 6,509,898.

Referring to claims 1, 12, 13 and 14, Chi et al. teach a system and method comprising a general purpose computer having memory capable of operating pursuant to instructions comprising an algorithm (column 5, lines 46-67 and further shown in Figure 1), wherein the algorithm further comprises the steps of loading the interaction metric between items into memory, optimizing the placement of nodes and edges pursuant to the interaction metric and generating a graphical representation of the nodes (elements) and edges (lines, or links connecting elements representing relationships) with corresponding interaction metrics (defining relationships between elements, such as parent-child relationships and usage information, optimizing the layout of the display according to the relationships, i.e., placing the highest used nodes farthest apart from each other so that they have the most growth space and displaying the layout), as recited in column 2, lines 16-46, column 7, lines 36-45 and column 8, lines 28-52. This is further shown in Figures 2, 14, 17 and 20.

Referring to claims 2 and 15, Chi et al. teach the interaction metric being a conditional probability (usage information such as frequency of use) (column 2, lines 36-44 and column 8, lines 28-38).

Referring to claim 3, Chi et al. teach the interaction metric being based on correlations between items (column 8, lines 28-32).

Referring to claims 4 and 16, Chi et al. teach the interaction metric comprising at least one of a cross-elasticity and cross-correlation between two different variables (the parent-child

and child-child relationships displayed in Figures 2 and 14 show the cross-correlation between the two items; for example, if a node has two children nodes, the higher used of the two children nodes would be placed above the lower used child node) (column 3, lines 1-11 and column 8, lines 28-52).

Referring to claims 5, 10, 11 and 17, Chi et al. teach the optimum placement of nodes and edges adheres to at least one of minimizing number of crossings between edges, distance between linked nodes is minimized, graph area is minimized, horizontal and vertical symmetries are maximized, and an angle between two edges onto a node is greater than or equal to a predetermined constant (spacing the root nodes farthest apart from each other so that the children nodes can be placed directly under the root nodes, therefore minimizing the distance between linked nodes and the number of crossed relationship lines) (column 3, lines 1-11 and column 8, lines 39-52).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chi et al. U.S. Patent 6,509,898, as applied to claims 1, 2, 4 and 5, and further in view of Weinberg et al. U.S. Patent 6,144,962.

Referring to claims 6-9, Chi et al. teach all of the limitations as applied to the claims above. Specifically, Chi et al. teaches the display of node-link relationships for elements based on interaction metrics (defining relationships between elements, such as parent-child relationships and usage information) (column 2, lines 16-46, column 7, lines 36-45 and column 8, lines 28-52 and further shown in Figures 2, 14, 17 and 20). However, Chi et al. fail to explicitly teach if the interaction metric is below a predetermined threshold the interaction between at least one of the below-threshold item and an edge is not graphically displayed. Weinberg et al. teach displaying node-link relationships for elements based on interaction metrics (parent child relationships) (column 2, lines 32-48). In addition, Weinberg et al. further teach not displaying the interaction if the interaction metric is below a predetermined threshold (only displaying links that are above a minimum activity threshold level) (column 28, lines 56-67 and column 9, lines 1-4). It would have been obvious to one of ordinary skill in the art, having the teachings of Chi et al. and Weinberg et al. before him at the time the invention was made, to modify the method and system for displaying items based on their interaction of Chi et al. to include displaying only the interactions that are above a certain threshold, as taught by Weinberg et al. One would have been motivated to make such a combination in order to avoid cluttering the display space with unimportant or non-relevant information, providing more space and focus for important information.

5. The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to consider these references fully when responding to this action. The documents cited therein teach similar nodal display of item interaction.

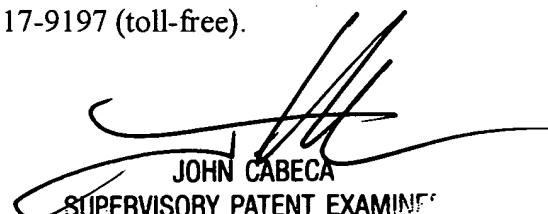
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ting Zhou whose telephone number is (703) 305-0328. The examiner can normally be reached on Monday - Friday 8:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (703) 308-3116. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 14, 2004


JOHN CABECA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Application/Control Number: 09/934,415
Art Unit: 2173

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